

CONFIDENTIAL

233/3 Inst. Sc.
CHEMISTRY
Practical
Paper 3
Oct. /Nov. 2008

THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education
CHEMISTRY
Paper 3
PRACTICAL

INSTRUCTIONS TO SCHOOLS

*The information contained in this paper is to enable the head of the school and the teacher in charge of Chemistry to make adequate preparations for this year's Chemistry practical examination. **NO ONE ELSE** should have access to this paper or acquire knowledge of its contents. Great care **MUST** be taken to ensure that the information herein does not reach the candidates either directly or indirectly. The teacher in charge of Chemistry should **NOT** perform any of the experiments in the same room as the candidates nor make the results of the experiments available to the candidates or give any other information related to the experiments to the candidates. Doing so will constitute an examination irregularity which is punishable.*

In addition to the apparatus and the fittings found in a Chemistry laboratory, each candidate will require the following:

1. ✓ 2.1g of solid A weighed accurately and supplied in a dry stoppered container
2. ✓ about 60 cm³ of solution B ✓
3. ✓ about 130 cm³ of sodium hydroxide solution ✓
4. ✓ one thermometer – 10°C - 110°C ✓
5. ✓ one stop watch/clock ✓
6. ✓ one 100ml beaker ✓
7. ✓ one burette 0 - 50 ml ✓
8. ✓ one pipette 25 ml. ✓
9. ✓ one volumetric flask 250 ml. ✓
10. ✓ about 500 cm³ of distilled water supplied in a wash bottle ✓
11. ✓ one label or means of labelling.
12. ✓ one pipette filler ✓
13. ✓ two conical flasks ✓
14. ✓ about 0.5g of solid D supplied in a stoppered container ✓
15. ✓ 0.2g of solid E supplied in a stoppered container ✓
16. ✓ about 0.5g of solid F supplied in a stoppered container ✓
17. ✓ six clean dry test-tubes ✓
18. ✓ one blue and one red litmus paper ✓
19. ✓ one 10 ml measuring cylinder ✓
20. ✓ one metallic spatula ✓
21. ✓ about 0.3g of sodium hydrogen carbonate (solid) ✓
22. ✓ one test-tube holder ✓
23. ✓ 15cm³ of 2M hydrochloric acid ✓

Access to

1. ✓ Bunsen burner. ✓
2. ✓ 2M aqueous ammonia supplied with a dropper. ✓
3. ✓ Acidified potassium dichromate (VI) supplied with a dropper. ✓
4. ✓ Acidified potassium manganate (VII) supplied with a dropper. ✓
5. ✓ Phenolphthalein indicator supplied with a dropper. ✓

NOTES

1. ✓ Solution B is prepared by adding 172.0cm³ (1.18g/cm³) of concentrated hydrochloric acid to about 500 cm³, of distilled water and diluting to one litre of solution.
2. ✓ Acidified potassium dichromate (VI) is prepared by dissolving 25 g of solid potassium dichromate (VI) in about 600cm³ of 2M sulphuric acid and diluting to one litre of solution.